



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,439	09/06/2005	Zeng Gang Liu	17170/008001	4460
22511	7590	03/06/2008		
OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010				
EXAMINER				
NGUYEN, XUAN LAN T				
ART UNIT		PAPER NUMBER		
3683				
NOTIFICATION DATE		DELIVERY MODE		
03/06/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@oshaliang.com

buta@oshaliang.com

Office Action Summary

Application No.

10/523,439

Applicant(s)

LIU, ZENG GANG

Examiner

Lan Nguyen

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 1/28/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- The abstract contains legalese "said".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 9-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Kuwabara (JP 2002-325422).

Re: claim 9, Kuwabara shows an electromagnetic retarder adapted to be arranged between a brake pedal and at least one wheel of a vehicle for assisting braking thereof through a transmission, as in the present invention, the electromagnetic retarder comprising: a rotor 32; and a stator 35, 36, wherein the stator has at least one cavity 40 formed therein and arranged to allow circulation of fluid therethrough for cooling the stator; wherein the electromagnetic retarder configured to be offset in relation to the transmission 11.

Re: claim 10, Kuwabara shows the rotor and the stator are coaxial and define an axis of the electromagnetic retarder along shaft 31, and wherein the axis of the electromagnetic retarder is offset from and parallel to an axis of the transmission 11.

Re: claims 11 and 12, Kuwabara shows a speed increasing device 13 for connection to the transmission, wherein the speed increasing device comprises a gear device.

Re: claim 13, Kuwabara shows the electromagnetic retarder comprises an arm 31 integrated with the rotor, and wherein the speed increasing device 13 is disposed between the arm 31 and a shaft 11 of the transmission.

Re: claim 14, Kuwabara shows the rotor to be disposed within the stator 35 and configured to rotate about an axis of the stator; and the at least one cavity 40 is formed within a wall of the stator and is extended by an extension supported by the wall that extends to an end of the stator generally perpendicular to a central axis of the electromagnetic retarder.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 9 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Even (US 4,864,173).

Re: claim 9, Even shows an electromagnetic retarder, as in the present invention, the electromagnetic retarder comprising: a rotor 2; and a stator 3, wherein the stator has

at least one cavity 7 formed therein and arranged to allow circulation of fluid therethrough for cooling the stator. Note that claim 9 recites suggestive language such as "adapted, configured, wherein". Hence, the preamble portion "adapted to be arranged between a brake pedal and at least one wheel of a vehicle for assisting braking thereof through a transmission" and the claimed feature "wherein the electromagnetic retarder configured to be offset in relation to the transmission" are being treated as suggestive and not positively claiming the recited structures. Even's brake as shown meets all the claimed features and would be capable of being arranged and being configured as suggested.

Re: claims 11 and 12, Even further shows a speed increasing device 30 for connection to the transmission, not shown but mentioned in column 1, line 8; wherein the speed increasing device comprises a gear device as mentioned in column 2, lines 42-45.

Re: claim 13, Even further shows the electromagnetic retarder comprises an arm 19 integrated with the rotor, and wherein the speed increasing device is disposed between the arm and a shaft 1 of the transmission.

Re: claim 14, Even shows the rotor 2 is disposed within the stator 3 and configured to rotate about an axis of the stator; and the at least one cavity 7 is formed within a wall of the stator and is extended by an extension supported by the wall that extends to an end of the stator generally perpendicular to a central axis of the electromagnetic retarder.

Re: claim 15, Even also shows an at least one coil 4; and an excitation alternator 13 configured to provide electric power to the coil.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Even (US 4,864,173) in view of DE 29609311.

Even's brake, as rejected above, lacks the arrangement as claimed. DE 29609311 teaches the concept of using a current brake as an additional brake wherein the current brake 12 comprises an axis 20 that is offset from and parallel to an axis 40 of the transmission 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have arranged the brake of Even to be offset from the transmission as taught by DE 29609311 when the brake is being used as an additional brake to further assist the braking operation and to save space for a small car as taught by DE 29609311.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Even (US 4,864,173) in view of Lefrancois et al. (US 5,270,605).

Even's brake as rejected above, lacks the alternator to be partially disposed inside the rotor. Lefrancois teaches the concept of disposing an alternator 21, 22

Art Unit: 3683

partially inside the rotor in order to provide a compact electromagnetic brake while taking advantage of the cooling system to cool the alternator. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Even's brake to comprise an alternator that is partially disposed inside the rotor as taught by Lefrancois in order to provide a compact electromagnetic brake while taking advantage of the cooling system to cool the alternator.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Okada and Lee et al. are cited for other brake systems which comprise the brakes being offset from the transmissions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/ 2-25-08
Primary Examiner
Art Unit 3683